

Remarks:

Reconsideration of the application is respectfully requested.

Claims 1 - 13 are presently pending in the application.

In the above-identified Office Action, claims 1 and 2 were rejected as allegedly being anticipated under 35 U.S.C. § 102(e) by U. S. Patent No. 5,797,096 to Lupien et al ("**LUPIEN**"). Claim 1 was further rejected as allegedly being anticipated under 35 U.S.C. § 102(e) by U. S. Patent No. 5,867,788 to Joensuu ("**JOENSUU**"). Claims 3, 5, 9 and 11 - 13 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over **LUPIEN** in view of U. S. Patent No. 5,657,217 to Mahany et al ("**MAHANY**"). Claim 4 was rejected under 35 U.S.C. § 103(a) as allegedly being obvious over **LUPIEN** in view of **MAHANY** (presumably the '317 patent and not the later Mahany reference cited in the Office Action paragraph) and further in view of U. S. Patent No. 5,781,862 to Da Silva et al ("**DA SILVA**"). Claim 6 was rejected under 35 U.S.C. § 103(a) as allegedly being obvious over **LUPIEN** in view of **MAHANY** (presumably, **MAHANY** '317 patent) and further in view of U. S. Patent No. 6,192,231 to Chapman et al ("**CHAPMAN**"). Claim 7 was rejected under 35 U.S.C. § 103(a) as allegedly being obvious over **LUPIEN** in view of **MAHANY**, as applied to claim 3, above, (presumably, **MAHANY** '317 patent) and further in view of **JOENSUU**. Claims 8 and 10 was rejected under 35 U.S.C. §

103(a) as allegedly being obvious over **LUPIEN** in view of **MAHANY** (presumably, **MAHANY** '317 patent) and further in view of U. S. Patent No. 5,734,979 to Lu et al ("**LU**").

Applicant respectfully traverses the above rejections.

- I. Applicant's claims all require, among other limitations, a "forwarding feature" including a "communicating" step and an "initiating" step.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful. All of Applicant's claims recite a method for controlling a switching device to implement a "**forwarding feature**". As will be discussed herebelow, Applicant's particularly claimed **forwarding feature** includes a "**communicating**" step and an "**initiating**" step, neither of which is found in the presently cited art.

- A. All of Applicant's claims recite, among other limitations, communicating, from the base station to the switching device, a control information item for activating a forwarding feature in the switching device.

Both independent claim 1 and claim 3 of the present application recite, among other limitations, communicating "a **control information item for activating a forwarding feature**

in the switching device". More particularly, Applicant's claim 1 recites, among other limitations:

"communicating, from the base station to a switching device, the terminal equipment identifier and a control information item for activating a forwarding feature in the switching device;"

Applicant's independent claim 3 recites a substantially similar limitation. The above limitation particularly defines Applicant's claimed communicating step as, among other things:

1) requiring "communicating" from the base station to a switching device; 2) requiring that the communicating step communicates a terminal equipment identifier and a "control information item"; 3) reciting that the control information item is for activating a "forwarding feature"; and 4) that the forwarding feature is activated in the switching device.

Among other places, in the specification of the instant application, the control information item is described on page 15, lines 5 - 16, as follows:

"The control information item S activates a performance feature of the switching device V for call diversion. A performance feature for call diversion is also very common in the field of wire-based communication and is standardized e.g. in accordance with the ETSI standard for ISDN. In the context of such a performance feature, a table - designated here as assignment table ZT - is usually managed in which there is specified for each terminal device for which a call diversion is active, a respective location in the communications system to which connection requests directed to the

terminal device are to be forwarded in the context of the call diversion." [emphasis added by Applicant]

The communication of the control information item from the base station to the switching device, is additionally discussed in the present application on page 16, lines 6 - 2, which state:

"Finally, Fig. 3 shows a state after a changeover of the mobile terminal device E1 to the radio cell FZ3 of the base station B3, which is coupled to the switching device V in a wire-free manner via the base station B2. In the course of logging on at this base station B3, the mobile terminal device E1 transmits its terminal equipment identifier EK1 to the base station B3 and is registered there as being able to be reached via the base station. The base station B3 thereupon transmits the terminal equipment identifier EK1 and also a base station identifier BK3, identifying the base station B3, to the base station B2 which is directly connected to the switching device V. This base station B2 combines the communicated base station identifier BK3 and the base station identifier BK2 identifying the base station B2 to form a path information item (BK3, BK2) describing the route from the switching device V to the base station B3. The base station B2 thereupon communicates to the switching controller VS the control information item S, the terminal equipment identifier EK1 and also the path information item (BK3, BK2)." [emphasis added by Applicant]

As such, as part of activating a forwarding feature, a base station of the claimed invention is required to communicate a control information item (i.e. BK3 and BK2) to the switching device, which will allow a connection to be made from the switching device to the mobile unit through a base station in communication with the switching device to a base station that is not in direct contact with the switching device. All of

Applicant's claims recite the above described "control information item for activating a forwarding feature in the switching device" limitation, among others.

B. All of Applicant's claims further recite, among other limitations, initiating a connection setup to be routed through the base station as a result of the communication, when requested.

Further, once the control information item is communicated to the switching device, all of Applicant's claims specify the use to which the information is put. For example, Applicant's claim 1 further recites, among other limitations,

"if a connection request is directed to the mobile terminal device, initiating a connection setup to be routed through the base station as a result of the communication." [emphasis added by Applicant]

Independent claim 3 recites a substantially similar limitation.

The above limitation particularly defines Applicant's claimed **initiating** step as requiring, among other things: 1) **initiating** a connection setup, if a connection request is directed to the mobile terminal device; 2) **initiating** the requested connection setup as a result of the communication of the control information item; and 3) **initiating** the connection setup through the base station. Note that Applicant's claimed invention requires the **switching device** to make use of the

control information item received from the base station, to route a call **through** the base station. The above limitation is fully supported in the specification of the present application, wherein, information stored in the **switching device** (i.e. BK3, BK2 of Fig. 3) by the base station (B2 of Fig. 3) is used to route a call **through** the base station (B2 of Fig. 3) to another base station (B3 of Fig. 3).

The claimed use by the switching device of the call diversion or "**forwarding feature**" is also fully supported in the specification of the present application. In connection with the illustration shown in Fig. 3, the present application states on page 16, line 25 - page 17, line 12:

"Once again - as described above - **the control information item S activates a performance feature of the switching device V for call diversion.** In this case, the communicated terminal equipment identifier EK1 and the communicated path information item (BK3, BK2) are entered in the assignment table ZT, in a manner assigned to one another. **As a result,** in the event of a connection request directed to the mobile terminal device E1, from the switching device V, after searching for the terminal equipment identifier EK1 of the mobile terminal device in the assignment table ZT, **a connection can be set up in a targeted manner via the route described by the assigned path information item (BK3, BK2) i.e. via the base stations B2 and B3, to the mobile terminal device E1.**" [emphasis added by Applicant]

In view of the foregoing, it can be seen that Applicant's claims require the particularly recited "**forwarding feature**",

which is fully described in the specification of the instant application.

II. The LUPIEN reference fails to teach or suggest, Applicant's claimed "forwarding feature", among other limitations of Applicant's claims.

The **LUPIEN** reference, cited in the Office Action, fails to teach or suggest , among other limitations, Applicant's particularly claimed **forwarding feature**. More specifically, **LUPIEN** fails to teach or suggest, among other things, Applicant's particularly claimed **communicating and initiating** steps.

Rather, **LUPIEN** discloses a system and method of maintaining control channel mode (CCM) status information (i.e., analog or digital) for a mobile station in a cellular network having a mobile switching center and a plurality of cells. In **LUPIEN**, the CCM status information is stored in a home location register (HLR), in addition to being stored in the mobile switching center. If the CCM status information at the mobile switching center is lost, the HLR is polled to reacquire the CCM status for a mobile user. See, col. 2, lines 31 - 61 of **LUPIEN**.

LUPIEN neither teaches, nor suggests, among other things, Applicant's claimed **communicating** step, for communicating from

the base station to the switching device, a **"control information item for activating a forwarding feature in the switching device."** Although LUPIEN discloses sending the CCM status from the mobile station to a switching station, the CCM status is not a "control information item for activating a forwarding feature", as required by Applicant's claims. The CCM status of LUPIEN only tells the switching center whether the mobile station is operating in digital or analog mode. The CCM status of LUPIEN does not provide information necessary for forwarding a call (i.e., the path information to route the call through the base station) required by Applicant's claims. LUPIEN's CCM status information, indicating only whether the mobile user in communication with a base station linked to the mobile switching station is in the analog or digital channel mode, is not analogous to Applicant's claimed **"control information item for activating a forwarding feature in the switching device"** (i.e. relating to the path for setting up a connection). As described in section I, above, the specification of the present application clearly defines Applicant's claimed **control information item** as being different from LUPIEN's CCM information.

Further, as the LUPIEN reference fails to teach or suggest communicating Applicant's claimed **"control information item for activating a forwarding feature"**, it follows that LUPIEN

also fails to teach or suggest Applicant's claimed **initiating** step. More specifically, the **LUPIEN** reference additionally fails to teach or suggest Applicant's particularly claimed step of initiating a connection **through** a base station **as a result of the communication**. A review of Figs. 1 and 2 of **LUPIEN** demonstrates that, in the **LUPIEN** reference, **each and every base station is shown as being directly connected to the mobile switching center**. Thus, none of the calls to the mobile station are forwarded by being routed **through** another base station. In **LUPIEN**, there is no need for Applicant's claimed **forwarding feature**. As such, **LUPIEN** teaches away from Applicant's claimed invention by eliminating any possible need for Applicant's **forwarding feature**.

In view of the foregoing, the **LUPIEN** reference cited against Applicant's claims 1 and 3 in the Office Action, fails to teach or suggest all the limitations of Applicant's claims. Thus, it is believed that Applicant's claims are allowable over the **LUPIEN** reference.

III. The JOENSUU reference also fails to teach or suggest Applicant's claimed communicating and initiating steps, among other limitations of Applicant's claims.

The **JOENSUU** reference, cited in the Office Action, additionally fails to teach or suggest, among other

limitations, Applicant's claimed **communicating** and **initiating** steps.

Rather, the **JOENSUU** reference discloses a general mobile network including a mobile switching center (MSC) that communicates information for registering the location of a mobile station with a home location register (HLR).

Note that the HLR of **JOENSUU**, or **LUPIEN** for that matter, can not be Applicant's claimed **"switching device"**. The HLRs of **JOENSUU** and **LUPIEN** neither **communicate** with a base station, nor **initiate** the particular connection setup as a result of the communication, as is required of Applicant's claimed **"switching device"**.

Among other limitations of Applicant's claims, the **JOENSUU** reference does not teach or suggest Applicant's claimed **"control information item for activating a forwarding feature in the switching device"**, which is communicated to the switching device from the base station. In **JOENSUU**, there is no **"forwarding feature"**, as defined in the specification of the instant application. Rather, **JOENSUU**, col. 3, lines 50 - 67, describes the following:

The network address representing the serving MSC 10 stored in the HLR 20 is later utilized by the mobile network to reroute an incoming call intended for the

mobile station 30 to the serving MSC 10. Accordingly, whenever a telecommunications subscriber dials a directory number associated with the mobile station 30, known as the Mobile Station Integrated Service Digital Network (MSISDN) number, the HLR 20 is queried by the mobile network to determine the current location of the mobile station 30. Utilizing the stored network address representing the serving MSC 10, the HLR 20 requests a roaming number from the serving MSC 10 in response to the receipt of the query signal. **The roaming number provided by the serving MSC 10 is then used by the telecommunications network to route the incoming signal towards the serving MSC 10. The serving MSC 10 then pages the mobile station 30 and accordingly establishes a speech connection with the mobile station 30.** [emphasis added by Applicant]

The "routing" discussed in JOENSUU, above, is **not** Applicant's claimed "forwarding feature". All "routing" discussed in JOENSUU is between the HLR and the MSCs. Applicant's claimed forwarding feature uses a control information item, sent from the base station to the switching station, to activate a "forwarding feature in the switching device".

Further, Applicant's claimed forwarding feature is used to **initiate** a connection setup **through** the base station. These limitations of Applicant's claims are discussed above in section I, that discussion being incorporated herein by reference. Contrary to Applicant's invention, JOENSUU discloses using information in the home register to route a call to a mobile switching center. About the routing from the switching center to the mobile unit, JOENSUU merely states:

"The serving MSC 10 then pages the mobile station 30 and accordingly establishes a speech connection with the mobile station 30."

See col. 3, lines 64 - 67. There is no disclosure in JOENSUU of activating a **forwarding feature** in the switching device to route a call **through** a base station, as required by Applicant's claims.

As with LUPIEN, it follows that if the JOENSUU reference fails to teach or suggest Applicant's claimed "**communicating**" step, then JOENSUU also fails to teach or suggest Applicant's claimed step of "**initiating a connection setup**" as a result of the communication. Further, JOENSUU fails to teach or suggest the Applicant's claimed forwarding of the connection **through** the base station.

From the foregoing, it can be seen that JOENSUU fails to teach or suggest, among other limitations, Applicant's claimed **communicating** and **initiating** steps. Thus, it is believed that Applicant's claims are allowable over the JOENSUU reference.

IV. The MAHANY, DA SILVA, CHAPMAN and LU references further fail to teach or suggest, among other limitations of Applicant's claims, Applicant's claimed communicating and initiating steps, and, resultantly, do not supply the elements missing from LUPIEN and JOENSUU.

The MAHANY, DA SILVA, CHAPMAN and LU references all additionally fail to teach or suggest, Applicant's claimed

"control information item for activating a forwarding feature" and Applicant's particularly claimed "initiating a connection setup", among other limitations, and, resultantly, do not supply the elements of Applicant's claims that are missing from the teachings of LUPIEN and JOENSUU.

A. The MAHANY reference fails to teach or suggest numerous elements present in Applicant's claims, including Applicant's particularly claimed communicating and initiating steps.

In the Office Action, paragraph 5, the combination of LUPIEN and MAHANY (5,657,317) was asserted against claim 3. Later, in paragraphs 6 - 9 of the Office Action, the combination of LUPIEN and MAHANY (5,949,776) "as applied to claim 3" was made against claims 4, 6 - 8 and 10. However, since it was the '317 MAHANY patent, and not the '776 MAHANY patent asserted against claim 3, for purposes of responding to the present Office Action, Applicant has assumed that all of the rejections use the '317 MAHANY patent.

Regardless, the MAHANY reference, like the JOENSUU and LUPIEN references, fails to teach or suggest Applicant's particularly claimed communicating and initiating steps.

Rather, MAHANY relates to a hierarchical communication system in which wireless local area networks (LANs) are employed in

an overall scheme to link portable or mobile computing devices. At best, **MAHANY** can be cited for disclosing that base stations can communicate with each other and the base host computer, wirelessly. See col. 11, line 66 - col. 12, line 3. **MAHANY** fails to teach or suggest Applicant's claimed **forwarding feature in a switching device**, or any motivation to have a switching device and/or to configure such a switching device to receive information from a base station, later **initiating** a communication by routing it **through** a base station.

Additionally, claim 3 of the instant application further recites, among other limitations,

"passing on the terminal equipment identifier from the first base station to the directly connected base station;"

This particularly set forth "**passing**" step of Applicant's claim 3 is additionally not found in **MAHANY**.

Thus, it is believed that Applicant's claims are allowable over the **MAHANY** reference.

B. The DA SILVA reference fails to teach or suggest numerous elements present in Applicant's claims, including Applicant's particularly claimed communicating and initiating steps.

The **DA SILVA** reference was cited in the Office Action, in combination with **LUPIEN** and **MAHANY**, as allegedly, showing a feature present in dependent claim 4. However, like the **MAHANY**, **JOENSUU** and **LUPIEN** references, **DA SILVA** fails to teach or suggest Applicant's particularly claimed **communicating** and **initiating** steps. As discussed in connection with **JOENSUU**, **DA SILVA** shows each base station being directly connected to the central switching control. See, Fig. 1. As such, in addition to failing to teach Applicant's particularly claimed **communicating** and **initiating** steps, **DA SILVA** further fails to teach or suggest the **passing** step of Applicant's claim 3, discussed above in connection with **MAHANY**.

Thus, it is believed that Applicant's claims are allowable over the **DA SILVA** reference.

C. The **CHAPMAN** reference fails to teach or suggest numerous elements present in Applicant's claims, including Applicant's particularly claimed communicating and initiating steps.

The **CHAPMAN** reference was cited in the Office Action, in combination with **LUPIEN** and **MAHANY**, as allegedly, showing a feature present in dependent claim 6. However, like the, **DA SILVA**, **MAHANY**, **JOENSUU** and **LUPIEN** references, **CHAPMAN** fails to teach or suggest Applicant's particularly claimed **communicating** and **initiating** steps. **CHAPMAN** discloses a

telephone apparatus connected to a telecommunications network via an exchange line. In cols.5 - 6, **CHAPMAN** makes the statement that the call handling unit 1 of that reference is designed to allow call diversion. However, the call diversion described in cols. 5 - 6 of **CHAPMAN** is not meaningfully described. For example, in col. 6, lines 18 - 24, the implementation of call diversion is described as follows:

"A network service in which a user can divert incoming calls to another number by programming the exchange to reroute the calls, for example by transmitting DTMF (dual tone multiple frequency tones) by means of keystrokes on his telephone keypad. When the service is activated, the PSTN routes all incoming calls to the new number."

In **CHAPMAN**, a "Call Transfer" feature is defined in similar detail. **CHAPMAN** does not disclose, among other limitations, Applicant's particularly claimed **communicating** and **initiating** steps.

Thus, it is believed that Applicant's claims are allowable over the **CHAPMAN** reference.

D. The LU reference fails to teach or suggest numerous elements present in Applicant's claims, including Applicant's particularly claimed communicating and initiating steps.

In the Office Action, **LU** is cited, in combination with **LUPIEN** and **MAHANY**, as allegedly teaching the limitations of dependent

claims 8 and 10. However, the LU reference, which discloses a cellular base station with intelligent call routing, also fails to teach or suggest, among other limitations, Applicant's particularly claimed **communicating** and **initiating** steps.

Thus, it is believed that Applicant's claims are allowable over the LU reference.

V. Conclusion.

As all of the cited references fail to teach, both the **communicating** and **initiating** steps of Applicant's claims, among other limitations, it is accordingly believed that none of the references, whether taken alone or in any combination, teach or suggest the features of independent claims 1 and 3. Claims 1 and 3 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claims 1 and 3. As it is believed that the claims were patentable over the cited art in their original form, the claims have not been amended to overcome the references.


In view of the foregoing, reconsideration and allowance of claims 1 - 13 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made.

Please charge any fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,


For Applicant

Kerry P. Sisselman
Reg. No. 37,237

KPS:cgm

December 9, 2004

Lerner and Greenberg, P.A.
Post Office Box 2480
Hollywood, FL 33022-2480
Tel: (954) 925-1100
Fax: (954) 925-1101